

PRELIMINARY AMENDMENT
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Page 6, before line 1, insert

-- DETAILED DESCRIPTION OF THE INVENTION --

Page 24, before line 1, insert

-- BRIEF DESCRIPTION OF THE DRAWINGS --.

Page 24, before line 7, insert

-- EXAMPLES --.

IN THE CLAIMS:

Please delete Claims 1-17.

Please add the following new claims:

-- Claim 18. A method of obtaining isolated selected mRNA species or isolated selected cDNA species useful for diagnosing or identifying a disease or condition or stage thereof in a prokaryotic or eukaryotic organism comprising the steps of:

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- (a) isolating mRNA from tissue, cells or body fluid of a normal prokaryotic or eukaryotic organism (normal sample), wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (b) isolating mRNA from corresponding tissue, cells or body fluid of a corresponding organism of step (a) which is known to have said disease or condition or a stage thereof (diseased sample), wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (c) separating, by a non-sequence based separation technique, mRNA species or cDNA species present within each of the resulting isolated mRNA or

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isolated cDNA of step (a) and step (b), wherein the resulting separated mRNA species are optionally subjected to reverse transcription to obtain separated cDNA species;

(d) selecting two or more mRNA species or two or more cDNA species from the resulting separated mRNA species or resulting separated cDNA species obtained in step (c), respectively, which are present at a different level in the normal sample than in the diseased sample by identifying a signal corresponding to each mRNA species or cDNA species, wherein the resulting selected two or more mRNA species are optionally subjected to reverse transcription to obtain two or more selected cDNA species; and

(e) isolating the resulting two or more selected mRNA species or resulting two or more selected cDNA species obtained in step (d) to obtain isolated selected mRNA species or isolated selected cDNA species, wherein the resulting isolated selected mRNA species are optionally subjected to reverse transcription to obtain isolated selected cDNA species.

Claim 19. The method as claimed in Claim 18, further comprising the step of:

(f) immobilizing the resulting isolated selected mRNA species or isolated selected cDNA species of step (e) on at least one solid support.

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Claim 20. The method as claimed in Claim 19, wherein, prior to immobilizing in step (f), the resulting isolated selected mRNA species or isolated selected cDNA species of step (e) are amplified.

Claim 21. The method as claimed in Claim 18, wherein in steps (a) and (b), the resulting isolated mRNA is subjected to reverse transcription to obtain isolated cDNA.

Claim 22. The method as claimed in Claim 21, wherein said isolated cDNA is amplified.)

Claim 23. The method as claimed in Claim 22, wherein said isolated cDNA is labeled.)

Claim 24. The method as claimed in Claim 18, wherein, in step (e), between 50 and 100 mRNA species or cDNA species are isolated and selected.

Claim 25. The method as claimed in Claim 18, wherein, in step (c), said separation technique is gel electrophoresis.

Claim 26. The method as claimed in Claim 18, wherein said organism is human.)

Claim 27. The method as claimed in Claim 19, wherein said solid support is a filter.)

Claim 28. The method as claimed in Claim 18, wherein said disease is cancer.)

Claim 29. A gene transcript pattern probe kit for diagnosing or identifying a disease or condition or stage thereof in a eukaryotic ~~or prokaryotic~~ organism comprising at least one solid support having immobilized thereon two or more mRNA species or cDNA species isolated and selected in accordance 43

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with the method as recited in steps (a) to (e) of Claims 18, 20, 21, 22, 23, 24, 25, 26, 27 or 28.

Claim 30. The gene transcript pattern probe kit as claimed in Claim 29, further comprising, for comparative purposes, mRNA or cDNA from a normal sample; or mRNA or cDNA from a diseased sample; or mRNA or cDNA from both a normal sample and a diseased sample.

Sub B2 ~~Claim 31. The gene transcript pattern probe kit as claimed in Claim 29, further comprising, for comparative purposes, the standard gene transcript pattern of Claim 33.~~

Claim 32. A method of preparing a gene transcript pattern probe kit comprising the steps of:

- (a) isolating mRNA from tissue, cells or body fluid of a normal prokaryotic or eukaryotic organism (normal sample), wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (b) isolating mRNA from corresponding tissue, cells or body fluid of a corresponding organism of step (a) which is known to have a disease or condition or a stage thereof (diseased sample), wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (c) separating, by a non-sequence based separation technique, mRNA species or cDNA species present within each of the resulting isolated mRNA or isolated cDNA of step (a) and step (b), wherein the resulting separated mRNA species are optionally

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subjected to reverse transcription to obtain separated cDNA species;

(d) selecting two or more mRNA species or two or more cDNA species from the resulting separated mRNA species or resulting separated cDNA species obtained in step (c), respectively, which are present at a different level in the normal sample than in the diseased sample by identifying a signal corresponding to each mRNA species or cDNA species, wherein the resulting selected two or more mRNA species are optionally subjected to reverse transcription to obtain two or more selected cDNA species;

(e) isolating the resulting two or more selected mRNA species or resulting two or more selected cDNA species obtained in step (d) to obtain isolated selected mRNA species or isolated selected cDNA species, wherein the resulting isolated selected mRNA species are optionally subjected to reverse transcription to obtain isolated selected cDNA species; and

(f) immobilizing the resulting isolated selected mRNA species or isolated selected cDNA species of step (e) on at least one solid support so as to form a gene transcript pattern probe kit.

Claim 33. A method of preparing a standard gene transcript pattern characteristic of a disease or condition or stage thereof of a prokaryotic or eukaryotic organism comprising the steps of:

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- (a) isolating mRNA from tissue, cells or body fluid of a test organism known to have said disease or condition or stage thereof of a prokaryotic or eukaryotic organism, wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA; and
- (b) hybridizing the resulting isolated mRNA or isolated cDNA of step (a) to the isolated selected mRNA species or isolated selected cDNA species which are immobilized in the gene transcript pattern probe kit of Claim 29, and assessing the amount of hybridization so as to obtain said standard gene transcript pattern, wherein the isolated selected mRNA species or isolated selected cDNA species are specific for said disease or condition or stage thereof.

Claim 34. A method of preparing a test gene transcript pattern comprising the steps of:

- (a) isolating mRNA from tissue, cells or body fluid of a test prokaryotic or eukaryotic organism, wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA; and
- (b) hybridizing the resulting isolated mRNA or isolated cDNA of step (a) to the isolated selected mRNA species or isolated selected cDNA species which are immobilized in the gene transcript pattern probe kit of Claim 29, and assessing the amount of

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hybridization so as to obtain said test gene transcript pattern, wherein the isolated selected mRNA species or isolated selected cDNA species are specific for a desired disease or condition or stage thereof.

Claim 35. A method of diagnosing or identifying a disease or condition or stage thereof in a test prokaryotic or eukaryotic organism comprising the steps of:

- (a) isolating mRNA from tissue, cells or body fluid of a test prokaryotic or eukaryotic organism, wherein the resulting isolated mRNA is optionally subjected to reverse transcription to obtain isolated cDNA;
- (b) hybridizing the resulting isolated mRNA or isolated cDNA of step (a) to the isolated selected mRNA species or isolated selected cDNA species which are immobilized in the gene transcript pattern probe kit of Claim 29, and assessing the amount of hybridization so as to obtain a hybridization pattern, wherein the isolated selected mRNA species or isolated selected cDNA species are specific for said disease or condition or stage thereof; and
- (c) comparing the resulting hybridization pattern obtained in step (b) with a hybridization pattern obtained by hybridizing isolated mRNA or isolated cDNA prepared from an organism known to have said disease or condition or stage thereof to the isolated selected mRNA species or isolated selected